

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

Claim 1 (currently amended): Reaction products of

- hydroxy-functional ~~Hydroxy-functional~~ binder components **ABC** containing a linear or branched main chain which has a polymethylene structure $-(CH_2)_n-$ or a polyester structure or a structure derived from fatty acid esters of glycerol or other polyhydric alcohols, characterised in that they have cyclic imide structures grafted on to the main chain, the imide nitrogen atom being substituted by carrying a hydroxyalkyl group or a hydroxyalkyl-aryl group as substituent, and
compounds selected from the group consisting of
- compounds D' containing acid groups, wherein the reaction is an esterification reaction, and wherein water is removed, and wherein the reaction products contain at least one acid group per molecule, and of
- compounds D'' selected from the group consisting of compounds having at least one isocyanate group and one acid group, and of compounds having at least one isocyanate group and at least one olefinically unsaturated group, wherein the reaction is an addition reaction, and wherein the reaction products have a urethane, an urea, or a thiourea structure, and wherein the reaction products contain, per molecule, at least one acid group, or at least one olefinically unsaturated group.

Claim 2 (currently amended): The reaction products of claim 1 wherein the hydroxy-functional ~~Hydroxy-functional~~ binder components **ABC** are obtained by reaction of olefinically unsaturated substances **A** having at least one olefinic double bond and a molar mass of from 400 g/mol to 6,000 g/mol, olefinically unsaturated cyclic acid anhydrides **B** and hydroxyamines **C** having at least one primary amino group and at least one hydroxyl group, wherein the radicals of the acid anhydrides **B** are bonded to the compounds **A** by a carbon-carbon bond, and wherein the acid anhydride groups are converted into acid imide groups by reaction with the hydroxyamines **C**.

Claim 3 (currently amended): The reaction products ~~hydroxy-functional binder components~~ **ABC** of claim 2, ~~characterised in that~~ wherein the olefinically unsaturated substances **A** are selected from the group consisting of oils, partially saponified or partially transesterified oils, low molar mass alkyd resins and oligomers or polymers of diolefins.

Claim 4 (currently amended): The reaction products ~~hydroxy-functional binder components~~ **ABC** of claim 2, ~~characterised in that~~ wherein the olefinically unsaturated cyclic acid anhydrides **B** are intramolecular anhydrides of aliphatic and cycloaliphatic dicarboxylic acids having 4 to 16 carbon atoms and contain at least one olefinic double bond.

Claim 5 (currently amended): The reaction products ~~hydroxy-functional binder components~~ **ABC** of claim 2, ~~characterised in that~~ wherein the hydroxyamines **C** are aromatic-aliphatic or aliphatic linear, branched or cyclic hydroxyamines having at least one hydroxyl groups and at least one primary amino group and at least two carbon atoms.

Claim 6 (currently amended): A process for the preparation of reaction products of hydroxy-functional binder components **ABC** according to one of claims 1 and 2 as claimed in claim 2, characterised in that

- olefinically unsaturated substances **A** having at least one olefinic double bond and a molar mass of from 400 g/mol to 6,000 g/mol are reacted with
- olefinically unsaturated cyclic acid anhydrides **B** to give an adduct linked via carbon-carbon bonds, which is reacted with
- hydroxyamines **C** having at least one primary amino group and at least one hydroxyl group, with conversion of the acid anhydride groups into acid imide groups by reaction with the hydroxyamines **C**,

to form hydroxy-functional binder components, and subsequent reaction of the hydroxyl groups of the said hydroxy-functional binder components with compounds selected from the group consisting of

- compounds **D'** containing acid groups, wherein the said subsequent reaction is an esterification reaction, and wherein water is removed, and wherein the reaction products contain at least one acid group per molecule, and of
- compounds **D''** selected from the group consisting of compounds having at least one isocyanate group and one acid group, and of compounds having at least one isocyanate group and at least one olefinically unsaturated group, wherein the said subsequent reaction is an addition reaction, and wherein the reaction leads to formation of a urethane structure, a urea structure, or a thiourea structure, and wherein the reaction products contain, per molecule, at least one acid group or at least one olefinically unsaturated group.

Claim 7 (cancelled)

Claim 8 (currently amended): The process of claim 6 wherein The method of use of claim 7, characterised in that the reaction with the compounds D' is carried out by esterification esterifying the hydroxy-functional binder components with compounds D' being selected from the group consisting of compounds D1, compounds D2, compounds D3, and compounds D4, under removal exit of water to form reaction products, the said reaction products containing at least one acid group per molecule, and wherein compounds D1 are polybasic acids having at least two acid groups, compounds D2 are fatty acids grafted with olefinically unsaturated acids, compounds D3 are oils grafted with olefinically unsaturated acids, and compounds D4 are polymers containing acid groups.

Claim 9 (currently amended): The process of claim 6 wherein The method of use of claim 7, characterised in that the reaction with the compounds D'', chosen from the said compounds D'' are selected from the group consisting of

- compounds D5 having at least one isocyanate group and at least one acid group, which are adducts of polyfunctional isocyanates with compounds that contain at least one group which is reactive towards isocyanate groups, and at least one acid group, and
- compounds D6 having at least one isocyanate group and at least one olefinically unsaturated group, which are adducts polyfunctional isocyanates and olefinically unsaturated compounds having hydroxyl groups,

wherein the reaction is an addition reaction, and wherein the reaction is carried out by formation of reaction products having a urethane structure, a urea structure or a

thiourethane structure, the said reaction products containing either at least one acid group or at least one olefinically unsaturated group per molecule.

Claim 10 (cancelled)

Claim 11 (new): A process for the preparation of reaction products of hydroxy-functional binder components as claimed in claim 1, wherein

- the said hydroxy-functional binder components contain a linear or branched main chain which has a polymethylene structure $-(CH_2)_n-$ or a polyester structure or a structure derived from fatty acid esters of glycerol or other polyhydric alcohols, characterised in that they have cyclic imide structures grafted on to the main chain, the imide nitrogen atom carrying a hydroxyalkyl group or a hydroxyalkyl-aryl group as substituent, are reacted with compounds selected from the group consisting of
 - compounds **D'** containing acid groups, wherein the reaction is an esterification reaction, and wherein water is removed and reaction products are formed, and wherein the said reaction products contain at least one acid group per molecule, and of
 - compounds **D''** selected from the group consisting of compounds having at least one isocyanate group and one acid group, and of compounds having at least one isocyanate group and at least one olefinically unsaturated group, wherein the reaction leads to formation of reaction products having a urethane structure, a urea structure, or a thiourea structure, and wherein the said reaction products contain, per molecule, at least one acid group or at least one olefinically unsaturated group.

Claim 12 (new): The process of claim 11 wherein the reaction with the compounds **D'** is carried out by esterifying the hydroxy-functional binder components with compounds **D'** being selected from the group consisting of compounds **D1**, compounds **D2**, compounds **D3**, and compounds **D4**, under removal of water and reaction products are formed, the said reaction products containing at least one acid group per molecule, and wherein compounds **D1** are polybasic acids having at least two acid groups, compounds **D2** are fatty acids grafted with olefinically unsaturated acids, compounds **D3** are oils grafted with olefinically unsaturated acids, and compounds **D4** are polymers containing acid groups.

Claim 13 (new): The process of claim 11 wherein the reaction is an addition reaction, and wherein in the reaction with the compounds **D''**, the said compounds **D''** are selected from the group consisting of

- compounds **D5** having at least one isocyanate group and at least one acid group, which are adducts of polyfunctional isocyanates with compounds that contain at least one group which is reactive towards isocyanate groups, and at least one acid group, and
- compounds **D6** having at least one isocyanate group and at least one olefinically unsaturated group, which are adducts polyfunctional isocyanates and olefinically unsaturated compounds having hydroxyl groups,

and wherein the reaction is carried out by formation of reaction products having a urethane structure, a urea structure or a thiourethane structure, the said reaction products containing either at least one acid group or at least one olefinically unsaturated group per molecule.